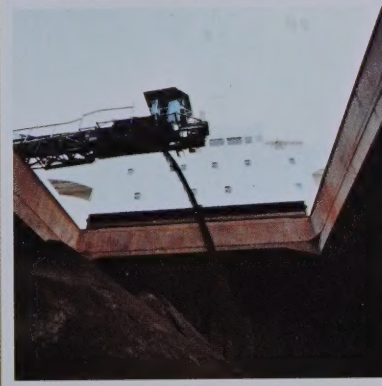
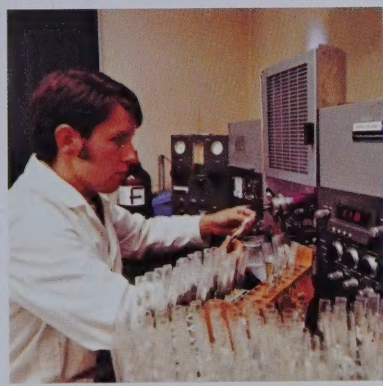




ANNUAL REPORT 1976
PLACER DEVELOPMENT LIMITED



Placer Development Limited

Directors

James C. Dudley, New York, U.S.A.,
Private Financial Consultant.

^{1,2}Ross G. Duthie, Vancouver, Canada,
President and Chief Executive Officer.

E. Jack Eldridge, Sydney, Australia,
Vice-President, Australasian Operations.

Albert E. Gazzard, Vancouver, Canada,
Director.

William James, Toronto, Canada,
Executive Vice-President,
Noranda Mines Limited.

J. Douglas Little, Vancouver, Canada,
Executive Vice-President.

¹Thomas H. McClelland, Vancouver, Canada,
Chairman of the Board.

¹Alfred Powis, Toronto, Canada,
President and Chief Executive Officer,
Noranda Mines Limited.

²J. Ernest Richardson, Vancouver, Canada,
Chairman, ⁴MacMillan Bloedel Limited

²P. Ritchie Sandwell, Vancouver, Canada,
Chairman of the Board and
Chief Executive Officer,

³*Sandwell & Company Limited.*

Vernon F. Taylor, Jr., Denver, U.S.A.,
President, Westhoma Oil Company.

^{1,2}H. Richard Whittall, Vancouver, Canada,
Partner, Richardson Securities of Canada.

¹*Member of the Executive Committee*

²*Member of the Audit Committee*

³*Consulting Engineers*

⁴*Forest Products Company*

The Company

Placer is a Canadian company, incorporated in the Province of British Columbia, whose business is primarily mineral exploration, development and production through subsidiary and associated companies. Canadians hold 77.3% of the issued shares, 10.8% are held in Australia and 11.9% are held in the United States and other countries.

Officers

Thomas H. McClelland, *Chairman of the Board*
Ross G. Duthie, *President and*
Chief Executive Officer

J. Douglas Little, *Executive Vice-President*

Lawrence Adie, *Vice President,*
Exploration

James H. Eastman, *Vice-President,*
Project Developments

E. Jack Eldridge, *Vice-President,*
Australasian Operations

James L. McPherson, *Vice-President,*
Finance and Administration

Anthony J. Petrina, *Vice-President, Operations*

John M. McConville, *Secretary and*
General Counsel

John Racich, *Treasurer*

Howard F. Gougeon, *Comptroller*

Donald Hallam, *Assistant Secretary*

David Michaelis, *Sydney Secretary*

Annual General Meeting

The Annual General Meeting of Shareholders of the Company will be held on Wednesday, May 4, 1977 at 12:00 Noon in the Social Suite East at the Vancouver Hotel, Vancouver, British Columbia, Canada.

Valuation Day Price

On December 22, 1971, established as valuation day by the Canadian Department of National Revenue, the price of the Company's Common Shares was \$12.75 per share (adjusted from \$25.50 following the share split in 1973).

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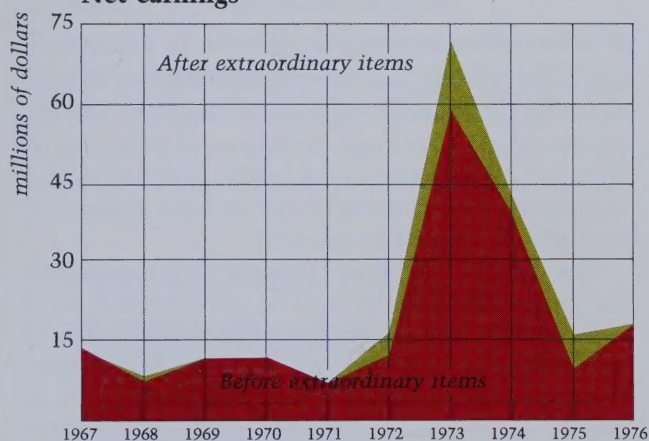
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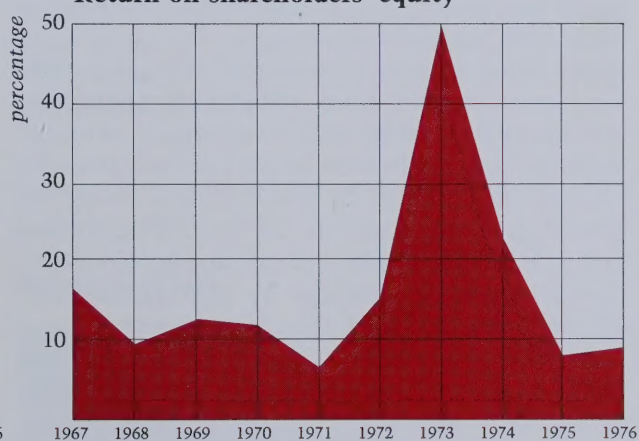
Comparative Highlights

	1976	1975
Sales	\$114,875,000	\$110,386,000
Equity in earnings of associated companies	\$ 11,088,000	\$ 10,785,000
Earnings before extraordinary items	\$ 17,960,000	\$ 9,768,000
— per share	\$ 1.49	\$ 0.81
Net earnings	\$ 17,960,000	\$ 16,285,000
— per share	\$ 1.49	\$ 1.35
Working capital	\$ 72,209,000	\$ 59,564,000
Exploration	\$ 6,436,000	\$ 10,077,000
— per share	\$ 0.53	\$ 0.84
Property additions	\$ 5,200,000	\$ 8,903,000
Common shares outstanding	12,064,004	12,036,822
Number of shareholders	5,337	5,574
Number of employees	2,652	2,794

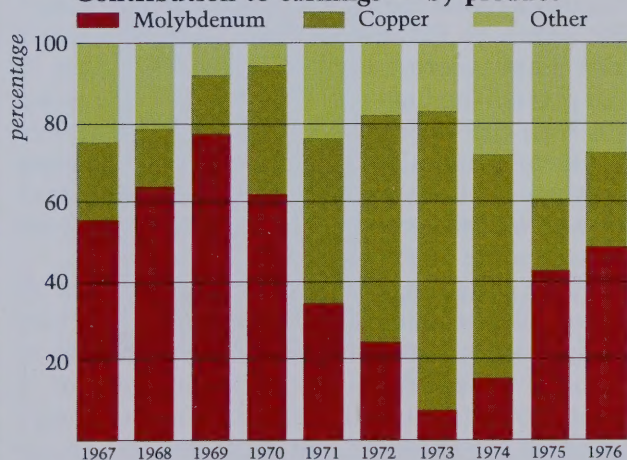
Net earnings



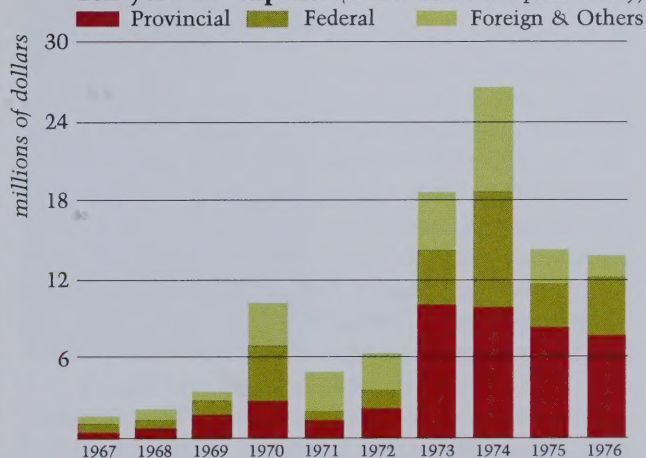
Return on shareholders' equity



Contribution to earnings — by product



Ten year tax expense (consolidated companies only)



Directors' Report to the Shareholders

The Board of Directors is pleased to present the 51st Annual Report for the year ended December 31, 1976.

Consolidated net earnings for the year ended December 31, 1976 were \$17,960,000 or \$1.49 per share including a credit of \$3,040,000 resulting from a reduction from 35% to 15% in Philippine withholding tax on Marcopper dividends. In 1975, consolidated net earnings were \$16,285,000 or \$1.35 per share after an extraordinary credit of \$6,517,000 or \$0.54 per share.

An improvement in earnings before extraordinary items resulted from: the abolition of provincial mineral royalties which had caused an exceptionally high tax burden in the previous year; increases in the price of molybdenum; lower exploration expenses and the credit resulting from a reduction in Philippine withholding tax referred to above. Reduced earnings by Mattagami Lake Mines tended to offset the above factors.

In view of the lower earnings in the previous year, the quarterly dividend was reduced from 30¢ to 20¢ for a total of 80¢ per share in 1976.

Acquisition

In December, 1976, your Company made an offer to purchase all outstanding shares of Canadian Export Gas & Oil Ltd. (CEGO) at \$6.45 (Canadian) per share. By March 16, 1977 a total of 7,104,793 or 86.7% of the CEGO shares had been purchased. It is hoped that 100% of the shares will be acquired in due course. A short-term loan of up to \$50 million from the Canadian Imperial Bank of Commerce is being used to finance the purchase until longer term financing is arranged.

CEGO is an oil and gas exploration and production company with headquarters in Calgary, Alberta. For the year ended April 30, 1976 its production amounted to 690 thousand barrels of oil and

9.6 billion cubic feet of natural gas. It holds working interests in oil and gas leases in Canada, the North Sea and the United States.

Your Company has acquired an interest in CEGO primarily because it offers diversification into the energy field. Your Directors believe that the demand for energy will increase and will not be subject to the severe fluctuations which characterize metal markets.

The Canadian investment climate

Since the initiation of tax reforms nearly a decade ago, the investment climate in Canada has deteriorated. Government policies and practices at both federal and provincial levels, coupled with a worldwide recession, have reduced the attractiveness of investment in industry.

The general public and in some cases, responsible people in industry and in government, have been slow in recognizing the results of the lack of new investment as older plants continued to operate and to show reasonably attractive profits as related to original capital investment. It is only recently that an awareness has been created in Canada that our high costs plus the lack of adequate return on investment has curtailed not only new plant construction but the modernization of old plants. The high cost of new construction and the high cost of production, whether attributable to labour, materials or taxes, have placed Canadian industry in an increasingly non-competitive position in world markets. This situation is most apparent in the mining industry.

There are strong indications, however, that all levels of government now recognize that past policies and attitudes have led to stagnation in mineral development. Some encouragement is being given to mineral exploration and to energy resource development, but more positive incen-

tives will still be required for metal mining. Steps which have been taken are encouraging, but immediate reaction by mining companies will not be apparent due to the loss of investment initiative and markets. Placer, recognizing this trend and in anticipation of improvements, is moving towards increasing the percentage of exploration expenditures in Canada.

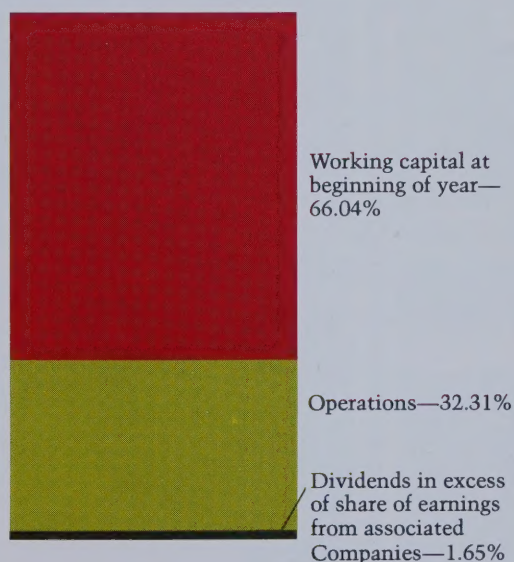
Taxes and the Anti-Inflation Board

Following abolition of the provincial mineral royalties, effective January 1, 1976, an improvement was apparent in the earnings of Placer group

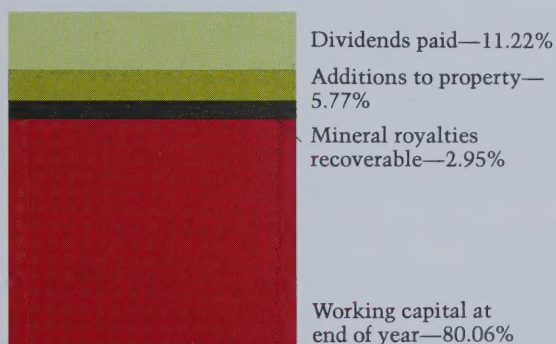
mines in British Columbia. Partially offsetting this trend, however, were: the new British Columbia Mineral Resource Tax of 17.5% on income from mining which replaces the royalties and the former Mining Tax of 15% on mining income; an increase in the provincial sales tax from 5% to 7%, and general increases in property taxes.

A significant portion of the Company's revenues is received from foreign sales and is, therefore, not subject to Anti-Inflation Board controls. Earnings from domestic sales, wage rates and dividends were subject to and within the guidelines of the A.I.B. controls in 1976.

Funds made available from:



Funds used for:



Operations

A 19-week strike by mine employees combined with a generally low copper price to restrict Gibraltar's earnings to the breakeven point. Gibraltar declared dividends of 15¢ per share in October, 1976 and February, 1977 (1975 — nil). Craigmont and Marcopper, two other significant copper producers, recorded earnings comparable to or slightly improved over the previous year. Marcopper's improved production in 1976 reflects its first full year of operations following an expansion of milling capacity. Placer received dividends from Craigmont amounting to \$1,811,000 (1975 — \$1,811,000), while dividends from Marcopper were \$5,860,000 (1975 — stock dividend only). Mattagami's earnings were down significantly due to the low price of zinc in 1976. Dividends received from Mattagami in 1976 amounted to \$3,592,000 (1975 — \$4,670,000).

The McDermitt Mine in Nevada completed its first full year of operations with a modest profit compared to a small loss in 1975 when the production of mercury was commenced.

Marketing

There was overall improvement in demand for mineral products in 1976 although this was not always translated into improved prices. Molybdenum proved to be the strongest product of the Placer group and its price improved through the year. World stocks of copper, zinc and mercury remained high despite rising consumption, and prices for these metals failed to improve significantly as a result. The average price of copper on the London Metal Exchange (L.M.E.) during 1976 was U.S. 63.5¢ per pound, a level barely sufficient to cover production costs at most older operating mines in British Columbia, and offering no incentive for the development of new copper mines.

Exploration

Although a reduction in the exploration budget was necessary in 1976, the programme was maintained at a level which was reasonable in view of reduced earnings. Mineral exploration is largely directed by the geological potential of a given area and Placer's 1976 exploration expenditures of \$6,436,000 (1975 — \$10,077,000) were distributed in a number of areas as follows: Canada — 36%, the United States — 34%, Australia — 12%, other countries — 18%. Minerals of primary interest were: molybdenum, uranium, silver, tungsten and columbium.

Personnel

At year-end Placer, with its subsidiary and associated companies, employed a total of 2,652 persons (1975 — 2,794) in a broad range of skills and occupations and in half a dozen countries. Direct employment by Placer Development Limited amounted to 212 persons (1975 — 228) at an annual wage and benefits cost of \$5,040,000 (1975 — \$4,760,000).

Officers

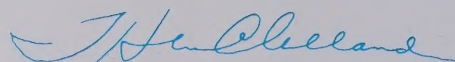
L. Adie, who had held the position of Manager, Exploration since 1968, was appointed Vice-President, Exploration to succeed Edgar A. Scholz who retired after 20 years of service with Placer. Mr. Scholz was closely associated with the evaluation and development of a number of important mining properties.

J. D. Little, Executive Vice-President, will resign from that position effective May 1, 1977. Mr. Little's decision was received by the Board with regret. He will continue in the future to make his experience available to the Company.

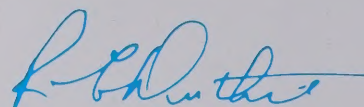
50th Anniversary

Placer marked its fiftieth anniversary in 1976 by sponsoring a series of Vancouver Symphony Orchestra concerts. Audiences in major Canadian cities and in British Columbia communities received the orchestra with enthusiasm and numerous commendations were received by Placer as a result.

On behalf of the Board of Directors,



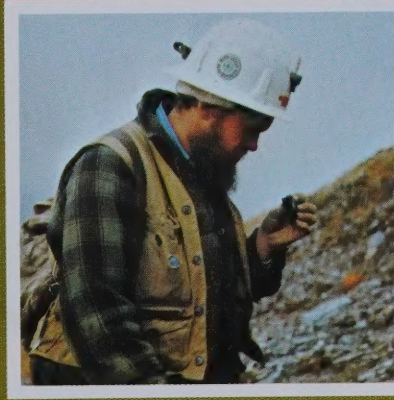
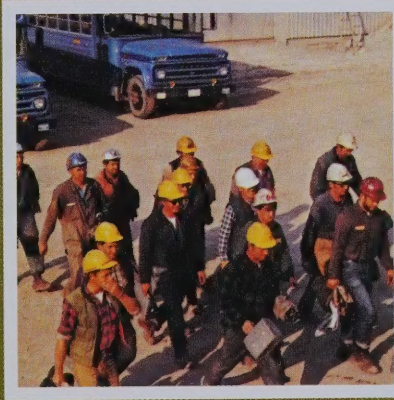
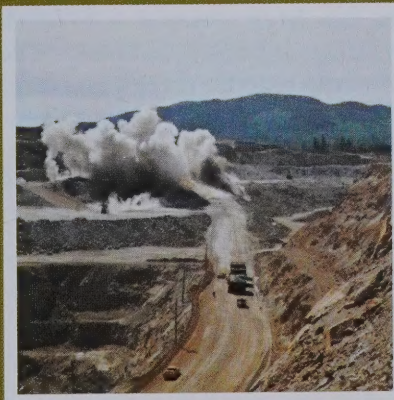
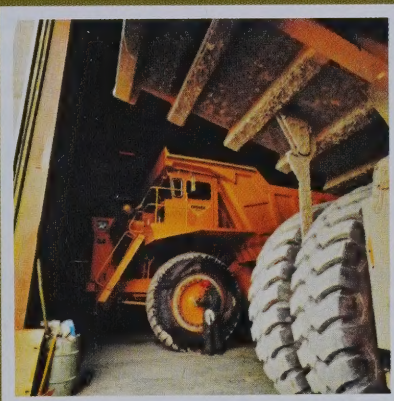
T. H. McClelland, Chairman



R. G. Duthie, President

Vancouver, B.C.
March 16, 1977

Review of 1976



Exploration

Hard Minerals

Placer's exploration programme was continued on an international basis in 1976. In the Yukon, a programme of 32,000 feet of diamond drilling was carried out on the Howard's Pass lead/zinc property. Some encouraging grades were obtained and additional diamond drilling will be carried out in 1977 when construction of a 50-mile access road is also planned. As of November 1, 1976, Placer, through its affiliated company, Explomin, S.A. de C.V. (34% interest) suspended exploration activities in Mexico pending resolution of matters affecting development of the Real de Angeles silver/lead/zinc property. In Australia, a subsidiary of Placer is investigating the development of a coal prospect at Wolgan, New South Wales.

Oil and gas

The acquisition of petroleum and natural gas rights in western Canada was continued in 1976.

Canex Placer Limited (100% interest) participated in seven exploratory wells, resulting in five gas discoveries, one oil discovery and one dry hole. Two development wells were drilled (50% interest in each); one was dry and one was completed as an oil well. Both oil wells qualify under British Columbia regulations for three years' royalty-free production.

Production amounted to 103,000 barrels of oil and 2.2. billion cubic feet (bcf) of gas during 1976 (1975 — 124,000 barrels and 0.5 bcf). The Company's interest in reserves, estimated as of January, 1977, is 1,840,000 barrels and 40.5 bcf.

A joint venture has been entered into with Craigmont Mines Limited (44.59% interest). The agreement, which may extend for three years from July 1, 1976, provides for each company to contribute \$1,500,000 annually to an oil and gas exploration and development programme managed by the Company in Alberta and British Columbia.

Metals and Markets

General

Demand for most minerals increased substantially in 1976 from the depressed levels of 1975. For some minerals, the recovery was accompanied by an improvement in price, but for others prices remained depressed throughout the year owing to overcapacity and to surplus stocks generated in the Western Bloc's 1974-75 recession.

The economic recovery of 1976 is expected to continue at a moderate pace through 1977 and some further improvement in demand and prices is expected.

Copper

A strong recovery in consumption during the first

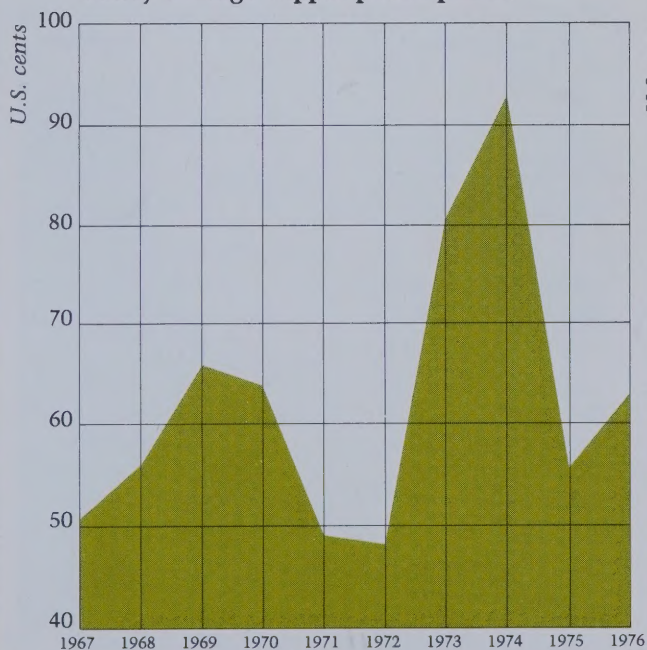
half of 1976 became weaker in the second half with overall consumption for the year increasing about 18% from the 1975 level. Western Bloc nations, however, still produced about 200,000 short tons of excess refined copper, causing surplus stocks to increase further to approximately 1,800,000 short tons. These stocks continued to keep prices low, particularly when demand weakened in the second half of the year.

Demand in 1977 should increase an additional 6%-10%, but the price is not likely to be favourable until most of the surplus stock is absorbed.

Molybdenum

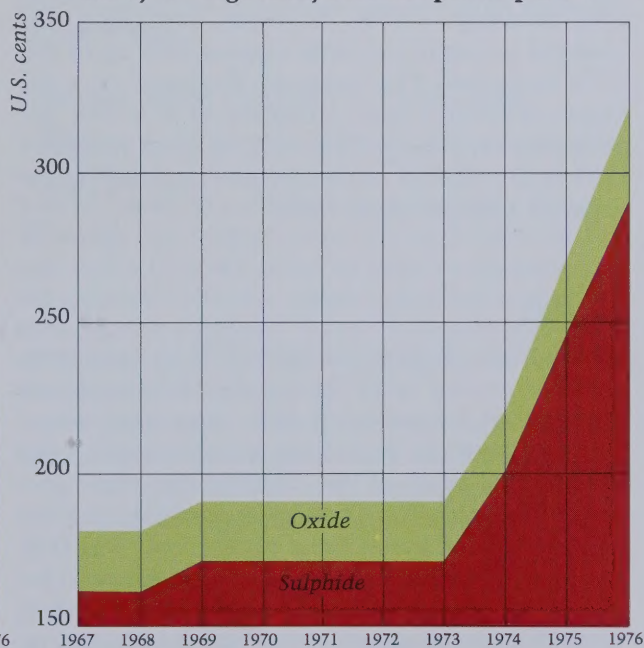
Although carbon steels were not in strong demand

Yearly average copper prices per lb.*



*L.M.E. cash settlement wirebar

Yearly average molybdenum prices per lb.*



*Published major primary producer price f.o.b. mine

in 1976, special steels were more popular and demand for molybdenum increased by 10%. The market was firm throughout the year and the price for molybdenum in molybdic oxide increased from U.S. \$2.69 per pound, f.o.b. Endako mine at the beginning of the year to U.S. \$3.54 per pound at the end. The price increased further at the beginning of 1977 to U.S. \$3.82 per pound. Supply will increase significantly in 1977 with new production from the Henderson mine of Amax Inc. Demand will likely be sufficient, however, to keep the market firm for most of the year.

Zinc

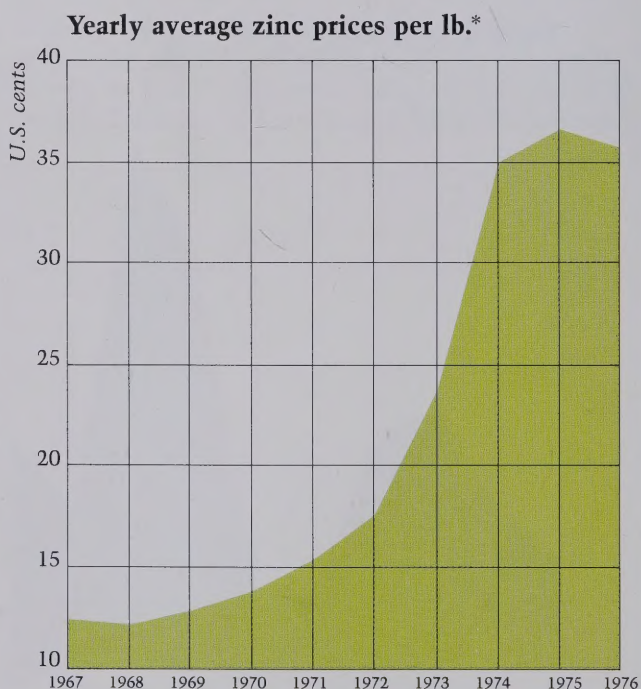
Demand rebounded by about 15% from the 1975 level principally because of activity in the automotive industry. Prices, however, remained unchanged owing to the large surplus built up in the 1975 recession. The European Producer Price for Prime Western Grade remained at U.S. 36¢ per pound for essentially all of 1976. In order to reduce the surplus stocks, most smelters operated below capacity through all of 1976.

Mercury

An increase of approximately 30% in consumption of mercury in 1976 over the 1975 level was greater than for most minerals. Very large inventories of mercury have been accumulated in the past several years of low demand and these prevented the price from increasing significantly. The average United States price for the year was U.S. \$121 per 76-pound flask, and the closing price was U.S. \$133 per flask. For the first time in several years there are reasonable prospects for continuing increases in consumption and price.

Gold

International conditions again influenced the price, with some countries directing their efforts towards keeping the price down and others attempting to prevent a large price decline. Response to the International Monetary Fund offerings was moderately strong, particularly towards the end of 1976. The current price is above \$140 per ounce and there are now indications of a significant recovery in demand for gold jewelry.



*European producer price

Operations

CANADA

Canex Placer Limited (100% interest)

Earnings of the Endako Mines Division improved significantly due to strong demand and increased prices for molybdenum through 1976. The Endako mine operated at full annual capacity producing 15.1 million pounds of molybdenum in sulphide concentrate of which 14.3 million pounds were converted to molybdc oxide.

Additional equipment, consisting of a 13-cubic-yard shovel, a drill and two reconditioned ore trucks, was placed in service to compensate for increasing haulage distances. Work commenced on the enlargement of facilities for equipment repair and molybdenum canning.

Endako	Years ended December 31,	
	1976	1975
FINANCIAL		
Gross revenues	\$53,063,000	\$38,558,000
Exploration	\$ 2,295,000	\$ 2,411,000
Income taxes and royalties	\$ 6,584,000	\$ 6,871,000
Net earnings*	\$ 8,774,000	\$ 4,408,000
OPERATIONS—ENDAKO		
Ore milled — tons	9,392,000	9,418,000
Daily average — tons ...	26,600	26,500
Grade — % MoS ₂	0.163	0.161
Recovery of molybdenum		
— %	81.90	82.99
Contained molybdenum		
produced — lbs.	15,076,000	15,100,000
Contained molybdenum		
shipped — lbs.	14,940,000	12,359,000
Inventory at year-end		
— lbs.	4,721,000	4,585,000
tons = short dry tons		

*Excludes the Company's equity in earnings of associated companies and dividends from a subsidiary.

In the community of Fraser Lake, a new, 16-unit apartment building was completed and an existing building was converted to self-contained apartments for employee housing.

A total of 11 operating days was lost due to secondary picketing by striking employees of Gibraltar Mines Limited who, under British Columbia law, are allowed to established pickets at a related operation. Both groups of employees are represented by the Canadian Association of Industrial, Mechanical and Allied Workers (CAIMAW).

Estimated mineable ore reserves at December 31, 1976, using a cut-off grade of 0.08% molybdenum disulphide, were 240,000,000 tons at an average grade of 0.141% molybdenum disulphide. Estimates of ore reserves were modified to reflect the improved economics resulting from removal of provincial mineral royalties and a higher price for molybdenum.

Gibraltar Mines Limited (71.9% interest)

A modest profit was recorded in 1976 compared to a loss in the preceding year. The removal of provincial royalties contributed to the improvement, although low copper prices through most of the year and a 19-week strike by mine employees during a period of higher copper prices had a negative influence on earnings. A new, two-year collective agreement with CAIMAW was signed in July and is effective to February 28, 1978.

Ore production during the year was from the Granite Lake Pit. Preparation of the Pollyanna Pit was continued and full-scale mining is expected to commence in that area in the fourth quarter of 1977.

Estimated mineable ore reserves at a cut-off grade of 0.25% copper on December 31, 1976 were 300,000,000 tons at an average grade of 0.36% copper.

GibraltarYears ended December 31,
1976 1975**FINANCIAL**

Gross revenues	\$27,692,000	\$39,973,000
Income taxes and royalties \$	419,000	\$ 2,008,000
Net earnings (loss)	\$ 943,000	\$ (376,000)
Dividends paid	\$ 1,712,000	—

OPERATIONS

Ore milled — tons	8,457,000	11,451,000
Daily average — tons ...	35,900	34,300
Grade — % copper	0.45	0.43
Recovery of copper — %	83.55	84.73
Concentrate produced		
— tons	122,400	158,700
Copper in concentrate		
— lbs.	63,703,000	83,559,000
Copper concentrate shipped		
— tons	112,200	170,000
Inventory at year-end		
— tons	20,600	10,300

tons = short dry tons

Craigmont Mines Limited (44.59% interest)

Earnings for the fiscal year ended October 31, 1976 improved slightly over the previous year following the abolition of provincial mineral royalties. Operations were normal through the year with production of copper concentrate 3% under the 1975 level and deliveries of iron concentrate reduced by 41% due to large inventories held by western Canadian coal mines. A two-year collec-

CraigmontYears Ended October 31,
1976 1975**FINANCIAL**

Gross revenues	\$24,309,000	\$25,032,000
Income taxes and royalties \$	3,884,000	\$ 5,402,000
Net earnings	\$ 3,919,000	\$ 3,605,000
Dividends paid	\$ 4,062,000	\$ 4,062,000

OPERATIONS

Ore milled — tons	1,946,000	1,966,000
Daily average — tons ...	5,400	5,400
Grade — % copper	1.35	1.42
Recovery of copper — %	96.34	96.18
Concentrate produced		
— tons	88,200	91,100
Copper in concentrate		
— lbs.	50,565,000	53,627,000
Iron concentrate produced		
— tons	58,700	56,100
Copper concentrate shipped		
— tons	94,000	89,400
Inventory at year end		
— tons	5,600	11,800

tons = short dry tons

tive agreement, effective until January 28, 1979, has been signed with the United Steelworkers of America.

Estimated geological ore reserves, at a cut-off grade of 0.7% copper, on October 31, 1976, were 5,696,000 tons at an average grade of 1.85% copper. These reserves are sufficient to sustain operations on the present scale for two to three years.

Mattagami Lake Mines Limited (N.P.L.) (27.12% interest)

Earnings in 1976 were reduced, primarily by the low price of zinc. Proven ore reserves at year-end

MattagamiYears ended December 31,
1976 1975**FINANCIAL**

Gross revenues	\$ 96,804,000	\$109,865,000
Income taxes	\$ 19,835,000	\$ 26,135,000
Consolidated net earnings \$	14,985,000	\$ 24,379,000
Dividends paid	\$ 13,244,000	\$ 17,216,000

OPERATIONS — MATTAGAMI

Ore milled — tons	1,225,900	1,285,700
Daily average — tons ..	3,350	3,500
Grade — % zinc	7.3	7.3
Recovery of zinc — %	91.6	92.4
Grade — % copper	0.55	0.62
Recovery of copper — %	73.8	75.6
Zinc concentrate		
produced — tons	154,900	162,200
Zinc in concentrate — lbs.	163,251,000	172,321,000
Copper concentrate		
produced — tons	20,500	24,900
Copper in concentrate		
— lbs.	9,940,000	12,003,000

OPERATIONS — CANADIAN ELECTROLYTIC ZINC

Zinc produced — tons ...	125,800	117,800
Cadmium produced — lbs.	341,300	400,800
Sulphuric acid produced		
— tons	118,200	116,000

OPERATIONS — MATTABI

Ore milled — tons	1,065,700	1,074,900
Daily average — tons ..	2,912	2,945
Grade — % zinc	8.1	7.3
Recovery of zinc — %	87.3	87.0
Grade — % copper	1.23	0.97
Recovery of copper		
— %	83.2	83.2
Zinc concentrate produced		
— tons	139,100	127,900
Zinc in concentrate		
— lbs.	151,225,000	137,330,000
Copper concentrate		
produced — tons	41,600	37,000
Copper in concentrate		
— lbs.	21,799,000	17,404,000

tons = short dry tons

were 9,605,000 tons grading 7.1% zinc, 0.58% copper, 0.015 ounces gold and 0.95 ounces silver per ton. Production was maintained at normal levels during the year.

At Lyon Lake (100% owned by Mattagami) the development shaft was completed together with stations and shaft services and 5,500 feet of development. Geological ore reserves remain the same at 4,030,000 tons grading 6.66% zinc, 1.15% copper, 0.63% lead, 3.39 ounces silver and 0.010 ounces gold per ton.

Open pit mining costs at the Mattabi mine (60% owned by Mattagami) were higher than normal because of increased stripping requirements. Preparation for underground mining beneath the open pit was sufficiently advanced to permit outlining of the orebody by underground diamond drilling. Ore reserves at year-end were estimated at 6,500,000 tons grading 6.89% zinc, 0.7% copper, 0.68% lead and 2.67 ounces of silver per ton.

Canadian Electrolytic Zinc (51.67% owned by Mattagami) completed the plant expansion to 620-tons-per-day capacity by year-end but because of poor demand for zinc metal, operated at a much lower rate in 1976. The Saint Lawrence Fertilizer plant which has been closed, has leased certain of its facilities, essential to zinc plant operation, to Canadian Electrolytic Zinc. The sulphuric acid produced and normally consumed in the fertilizer plant has been sold in other markets.

The concentrate and metal output of all operations was marketed by Noranda Sales Corporation.

UNITED STATES

McDermitt Mine (51% interest)

The Company's earnings from McDermitt Mine were \$303,000 in 1976, the first full year of operations. This compares to a loss of \$75,000 for the seven-month period in 1975 when the mine commenced production of mercury in Nevada. The level of earnings, however, was disappointing as it reflected continued low prices caused by large stocks of mercury overhanging the market. Production for the year totalled 23,000 flasks.

Ore grade and tonnage compare well with geological estimates although a greater than anticipated proportion of the ore occurs as hard opalite which requires increased drilling and blasting. The grinding circuit operated under fully autogenous conditions during the year and furnace operating conditions improved following a number of minor modifications to the feed and recovery circuits.

McDermitt	Year ended December 31, 1976	Seven months ended December 31, 1975
FINANCIAL		
Company's share of earnings (loss)	\$ 303,000	\$ (75,000)
OPERATIONS		
Concentrator feed — tons .	102,700	47,600
Grade — lbs./ton	18.0	17.83
Recovery of mercury — %	87.60	87.86
Concentrate produced — tons	900	500
Mercury produced — lbs. .	1,728,700	443,800
Mercury shipped — lbs. ...	1,392,900	357,200
tons = short dry tons		

In order to ensure employee health and safety, plant areas are closely monitored and strict procedures of personal hygiene and general housekeeping are followed. As a result, tests conducted by the U.S. Environmental Protection Agency in 1976 determined that plant emissions are well under E.P.A. standards at approximately 25% of the maximum allowable 2,300 grams per day.

At year-end, estimated mineable ore reserves were 2,874,000 tons at an average grade of 10 pounds of mercury per ton.

Cortez Gold Mines (28.3% interest)

The Cortez mill was shut down in August following exhaustion of mill grade ore on both the Gold Acres and the original Cortez claims, although leaching of low-grade stockpiles was continued at

Cortez	Years ended December 31,	
	1976	1975
FINANCIAL		
Net earnings	\$1,100,000	\$4,154,000
OPERATIONS —		
CORTEZ/GOLD ACRES		
Ore milled — tons	83,700	754,100
Daily average — tons ..	2,300	2,100
Grade — oz. gold/ton ...	0.084	0.081
Recovery of gold — % ..	77.0	79.0
Gold produced by milling — oz.	9,000	48,500
Gold produced by leaching — oz.	18,700	25,400
Silver produced — oz.	—	14,300
tons = short dry tons		
oz. = troy ounces		

a reduced rate. Mining equipment was sold by auction on September 30, 1976 netting approximately \$1,000,000, while most of the mill was "mothballed" until further exploration in the area can be completed and evaluated.

PHILIPPINES

Marcopper Mining Corporation (39.89% interest)

Essentially all remaining projects in the expansion programme were completed and as a result, copper production reached a new high level by the end of 1976. Mill throughput increased significantly and, although there was a slight decrease in grade of ore, this was compensated for by improved recovery. Production of leached copper declined due to an absence of oxide ore.

Mineable reserves in the Tapian ore zone at year-end were 85,000,000 tons with an average grade of 0.58% copper, using a cut-off grade of 0.40% copper.

At the minesite an extensive diamond drilling programme has indicated an orebody under the tailing disposal area. Geological reserves are estimated in excess of 200,000,000 tons at 0.57% copper using a cut-off grade of 0.40% copper. Preparations for developing this orebody are under way.

Marcopper	Years ended December 31,	
	1976	1975

FINANCIAL

Gross revenues	\$ 49,975,000	\$ 37,752,000
Income taxes	\$ 5,571,000	\$ 2,067,000
Net earnings	\$ 5,873,000	\$ 6,864,000
Cash dividends paid	\$ 12,763,000	—

OPERATIONS

Ore milled — tons	9,744,100	7,204,700
Daily average — tons ..	26,700	21,000
Grade — % copper	0.59	0.58
Recovery of copper		
— %	87.5	83.4
Concentrate produced		
— tons	191,300	141,000
Leach concentrate		
produced — tons	3,400	4,300
Copper in concentrate		
— lbs.	104,795,100	76,612,300
Gold in concentrate — oz.	39,500	31,800
Silver in concentrate — oz.	232,200	161,000
Copper concentrate		
shipped — tons	184,100	141,900
Inventory at year-end		
— tons	17,300	6,700

tons = short dry tons
oz. = troy ounces

During 1976 Marcopper committed itself to acquire a 5% interest in a newly incorporated Philippine smelter company which is a joint venture between the Philippine government, the Philippine copper mining industry and foreign investors. The smelter is scheduled for completion in 1979.

Marcopper also became associated with British Columbia Packers Limited in a project to evaluate the potential of buying and processing tuna in the Philippines for domestic and foreign markets.

AUSTRALIA

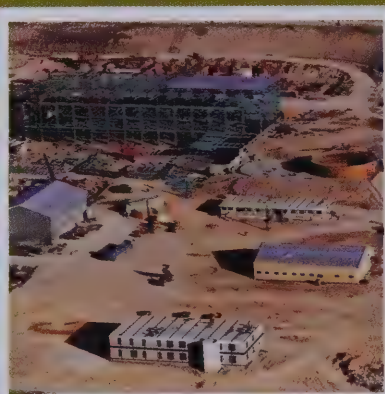
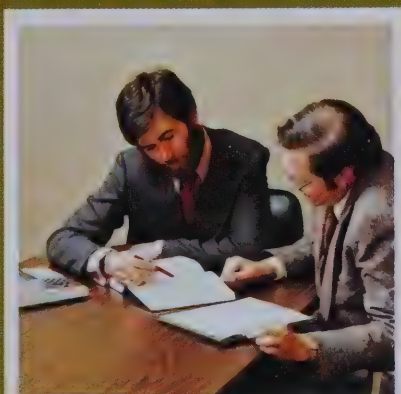
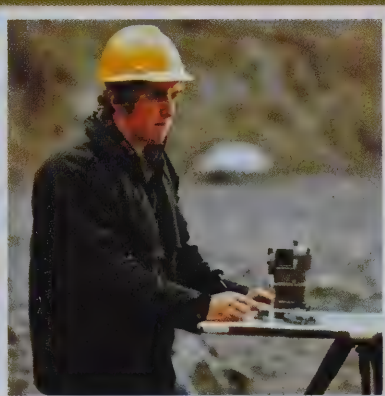
Placer Exploration Limited (100% interest)

In Australia, Placer Exploration and its subsidiary and associated companies experienced good sales and earnings although the Australian economy did not show a significant improvement in 1976. The position of Fox Manufacturing Company (100% interest) in export sales was maintained with new contracts to supply conveyor systems to large

Australia	Years ended December 31,	
	1976	1975
FINANCIAL		
Gross revenues	\$34,999,000	\$33,288,000
Income taxes	\$ 444,000	\$ 1,262,000
Earnings before extra-ordinary income	\$ 1,170,000	\$ 1,077,000
Extraordinary income, net of taxes	—	\$ 6,640,000

overseas projects. Sales in 1976 were \$24,807,000 (1975 — \$23,940,000). The Timber Division (100% interest) improved its share of the market as a local plywood producer and distributor although building activity remained generally low. Sales in 1976 were \$9,062,000 (1975 — \$8,307,000). Sales for Molybond Laboratories (100% interest) increased to a record level of \$1,213,000 (1975 — \$963,000). Sales of Northern Cattle Company (50% interest) in 1976 were higher, at \$1,506,000 (1975 — \$1,298,000) despite a depressed market and marginal weather conditions. Herd numbers increased to 79,500 (1975 — 76,000) at year-end.

The Mine Development Process — Construction



The Mine Development Process — Construction

Different cartoonists have discovered humour in the same situation which depicts a bridge under construction from two ends towards the middle. It is apparent, however, that the two sides are not going to meet. The humour lies in the sheer size of the error which, at the late stage shown by the cartoon, is virtually uncorrectable. Also implied in the situation is the thought that a blueprint or plan would have been helpful. The same applies to all construction, from the do-it-yourself shelf to bridge building – and particularly to mine construction.

Although many things affect a mine's profitability, its basic design, engineering and construction are among the most important since they will influence all future operating costs to some degree. The following essay, "The Mine Development Process – Construction", outlines the process of building a mine and shows that there is much more to it than meets the eye.

The example used is that of an open pit mine such as those recently developed in British Columbia, in which the ore zone occurs relatively close to the surface.

Initial stage of open pit development requires the removal of large quantities of barren overburden and waste rock in order to reach the mineral zone. Even at this early stage, engineers and geologists have a detailed projection of what the final pit will look like after 25 or more years of mining activity.



Discovery and evaluation

Potentially valuable minerals are found fairly frequently around the world, but seldom with the two requisites for mining — an economic grade (concentration of mineral), and a total volume of ore large enough to justify the investment.

Of the many mineral occurrences, a few will appear to have good potential and must therefore be tested extensively. Although absolute proof that a mine will operate profitably is impossible to establish beforehand, the mine developer strives to approach this standard by preparing a *feasibility report*, a theoretical plan which projects all aspects of the potential mine's operation on paper. For instance, a mine must be designed and built with flexibility in its cost structure to absorb cyclical prices since, through its life, market demand and prices will rise and fall without regard to any single supplier. Such diverse considerations as sources of financing and the most efficient metallurgical processes are also explored in the feasibility report.

The value of this report is that it shows up weaknesses in the projected operation in time for the developer to abandon the project or adopt another approach and thus avoid costly errors. In short, it helps the developer to build bridges that meet in the centre.

When there is a firm indication that a mineral zone can indeed become a mine, the decision is made to proceed with the next logical phase of the mine development process — construction.

The need for speed

Modern mining practice makes it possible to develop low grade mineral zones by mining large tonnages of ore and lowering unit costs. But the costs of building a mine to operate on this scale now run in excess of \$100 million, and the development decision is, therefore, very serious.

Speed is one of the critical factors. Interest costs begin to accrue immediately the first money is drawn from the development loan, and will continue through the mine's development and into the production phase. In addition, the basic assumptions of the feasibility report will change with the passage of time. While a change here or there may be endured, too many over a number of months can significantly alter the formula upon which the development is based.

Getting started

Following the decision to develop, a great many things happen at once. Local suppliers of transport, utilities, building materials and a hundred other goods or services are called upon to assist in their various specialized areas. A large construction force, including most of the skilled trades, is organized. Elsewhere in Canada, fabricators of a wide variety of components prepare to quote for orders which together will total many millions of dollars. At the offices of large banks and of deepsea shipping fleets, tasks and deadlines related to this project are assigned.

Overall responsibility for the entire construction programme rests with the mining company's engineering department or its equivalent. This department will oversee the design and construction work which may be done in-house or by contract. In either case, the company retains construction control. Consultants and sub-contractors in such specialties as electrical design, tailing dam design/construction and testing are engaged.

This is the fourth essay in a series on the Mine Development Process. Reprints of the previous articles are available on request. Please contact: Corporate Communications, Placer Development Limited, 700-1030 West Georgia Street, Vancouver, B.C. V6E 3A8

A wide range of permits and licences are needed from the various branches of local and provincial governments. The developer's legal staff will arrange for surface rights for mine and plant areas and for the ground that will be required for various mining activities. Water rights will be needed, as will rights-of-way for roads, pipes and power lines. Utility supplies — electric power, gas, telephones and communications — must be arranged on both a temporary and permanent basis.

One of the more important areas for planning is environment protection. A pre-development area study is often carried out on flora, fauna, water and air characteristics. Pollution control devices will be part of the base design where required, and a programme to return land to a natural state when mining operations cease will also be prepared.

Scheduling

In Canada, the march of the seasons dictates the construction schedule. Site clearing and general excavation can be carried out in winter, but foundations and major building erection should be carried out during summer and autumn. Equipment and service installations may then be accomplished — comfortably indoors — during the second winter. Pre-production mining can usually be done all year round.

A "critical path network chart" is used to pre-plan the construction programme. To prepare this chart, a comprehensive list of the hundreds of individual tasks is made. The time element for every task is then estimated, and its sequential relationship to other tasks established. For example, an item of fixed machinery cannot be installed until the machine has been delivered *and* a foundation has been laid for it, while the foundation itself requires a previous excavation.

Purchasing can be particularly critical in the

timing of the construction programme. Items of major equipment such as shovels and trucks for the open pit, and crushers and grinding mills for the concentrator, cannot be bought "off the shelf." Often they must be ordered as much as two or more years before the delivery date which is specified in the critical path diagram. The delivery method will be set out in advance, particularly for very large or heavy equipment. Where capital items are shipped across national boundaries, customs clearance is required.

Construction

Planning and establishing a mine construction project has similarities to the logistical problems of a small army. The prime contractor will be responsible for food, health, accommodation and recreation facilities for the thousand or so tradesmen and support personnel required during the construction period.

The contractor must also provide water and power, and deliver a wide range of construction equipment such as cranes, loaders, excavators and bulldozers to the site. Temporary, but complete workshops must be established for welders, carpenters and painters, while offices for supervisors, engineers and draughtsmen will also be set up.

The broad phases through which construction advances are: clearing, general site excavations, detailed excavations, major equipment and building foundations, building erection, major equipment installations, interior structures, pipework and electric cabling, testing and equipment run-in, leading finally to formal commissioning and hand-over to the new mine's operators. The object is to schedule individual tasks so that demand for personnel and equipment is spread as evenly as possible through the entire project.

Development of the ore zone

Preparation of the future open pit for production commences immediately following the decision to develop. The first step is clearing and stripping of the barren cover. Then, while construction of the mill is still in progress, mining of hard rock, which may be either waste or ore, will begin. It is during this stage that the operating crew acquires experience on production mining equipment. They must establish working room in the orebody, and be capable of producing a daily tonnage to match mill requirements by start-up.

Diamond drilling adequate for estimating ore reserves would have been completed much earlier for use in the feasibility report, but additional fill-in drilling may now be needed for detailed planning of the early years of mining.

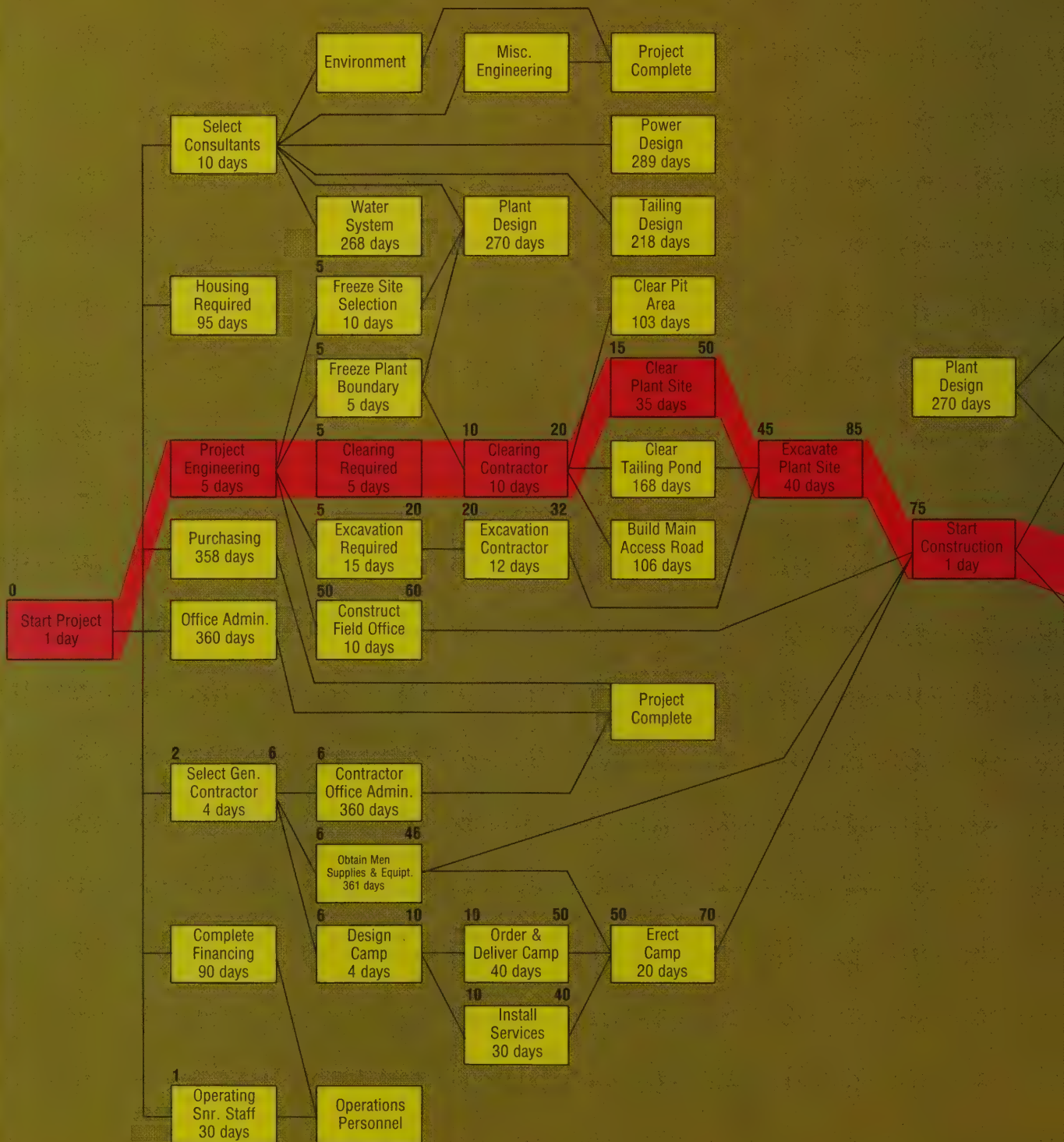
Engagement of operating staff

Recruiting the right people to run a mine is a critical part of the mine development process. The mine manager must be an able administrator as well as an experienced miner. He and the heads of

Concentrator, work shop, laboratory, office and other buildings are focus of activity during construction. Materials and equipment arrive continuously at the site according to a precise schedule. Objective is to complete construction on schedule, commence production of a marketable product, and create a positive cash flow.



Mine Construction as Charted on a Critical Path Method Diagram



The complexity of mine construction is indicated by this Critical Path Method (CPM) diagram which shows a portion of the construction program from the development decision through to completion. In practice, each task indicated on the diagram, and many others which have been omitted for simplicity, would be represented by one or more com-

plete diagrams. To prepare for the construction of a reasonably large mine, upwards of one thousand manhours would be required simply to draft all of the CPMs.

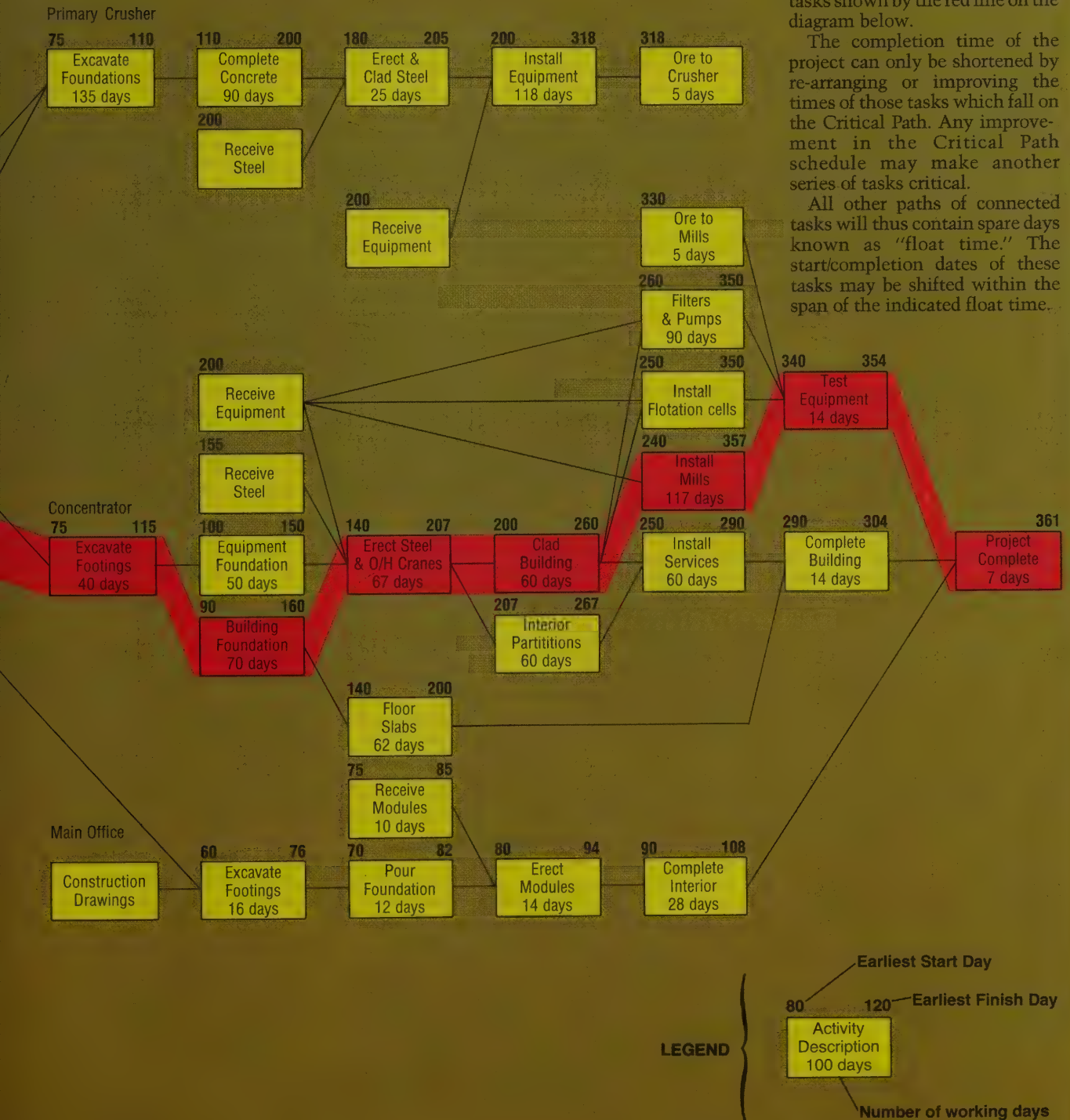
This diagram represents a method employed by engineering planners to identify all primary tasks and their relationship to each other in terms of time. Construction times for each task are

estimated with allowance for factors such as camp size, work force availability, equipment availability, transportation, climatic conditions, etc.

When estimated construction times and sequences are applied to a CPM diagram, a Critical Path emerges which indicates the series of events which control the completion date of the project. The Critical Path is that series of tasks shown by the red line on the diagram below.

The completion time of the project can only be shortened by re-arranging or improving the times of those tasks which fall on the Critical Path. Any improvement in the Critical Path schedule may make another series of tasks critical.

All other paths of connected tasks will thus contain spare days known as "float time." The start/completion dates of these tasks may be shifted within the span of the indicated float time.



departments — mine superintendent, mill superintendent and others — are assigned to the project early to ensure that they become familiar with their responsibilities by start-up.

Mining crews are added as their equipment becomes available. Experienced journeymen are recruited to establish equipment maintenance routines, while the administrative section now expands to include such functions as accounting and personnel administration.

Plant operators are the last to be recruited. Here, a nucleus of experienced men is needed to train other employees during the plant run-in period.

Housing and employee services

Mines must be established where the minerals are found, and this is seldom close to schools and shopping. Building a company town near the minesite has the advantage of proximity, but the town is then tied to the mine's future welfare.

It is often more advantageous to locate employees in an existing community even though added travelling time and expense are involved. Houses will thus find a better resale market, while families generally appreciate the broader range of services which already exists. The greater variety of social activities and acquaintances which are available to mine families through this arrangements is also generally more acceptable.

Completion

In the late stages of construction the following picture will emerge.

Development of the pit has been progressing over the months and the mine is now ready to supply the concentrator at the desired daily rate. Construction of the plant has been completed and utility services have been provided and connected.

The recruitment of a work force is virtually complete. Concentrator equipment has been tested, adjusted and turned over to the operating crews.

Ore is now fed to the plant, normally to the crusher sections first which have stockpiles as part of the circuit, and can be operated independently.

Testing of the milling and flotation units follows next. Adjustments are made to obtain the desired fineness of grind and the optimum mineral separation in the flotation cells. Finally, the concentrate handling systems are brought into action.

With the mine and mill completed except for minor refinements, and demonstrably doing the jobs for which they were designed, control passes from engineering to the operations department.

Even now, however, the mine has one remaining task. It must discharge the development loan as rapidly as possible in order to place itself on a secure financial footing. Today, it would not be unusual for a large, open pit mine to commence operations with a debt in excess of \$100 million.

Given a reasonable degree of accuracy in the major assumptions of the feasibility report (a market price equal to, or better than the forecast, and no serious change in tax regulations), the mine developers will be able to discharge the debt within the anticipated time limits. Profits which the mine may then be expected to earn will be directed to new exploration, plant upkeep or expansion, and dividends.

One last thought should be expressed on the development of a mine. Figuratively, it may become the parent of some future mine by virtue of its dividends and profits. These, when perceived as adequate to compensate for risks, may be reinvested in new mineral exploration and development. The entire process is thus a self-perpetuating cycle helping to guarantee future health of the industry, and ultimately, of the country.

Consolidated Statement of Earnings

(in thousands)

	Years ended December 31,	
	1976	1975
REVENUES:		
Sales	\$114,875	\$110,386
Interest and other income	<u>6,073</u>	<u>5,801</u>
	120,948	116,187
EXPENSES:		
Cost of sales	81,053	78,460
Depreciation and depletion	9,377	9,307
Selling, general and administrative	8,876	9,419
Exploration	<u>6,436</u>	<u>10,077</u>
	105,742	107,263
	15,206	8,924
TAXES — INCOME, RESOURCE AND ROYALTIES (Note 6):		
Current	6,953	10,345
Deferred	<u>1,116</u>	<u>(293)</u>
	8,069	10,052
Earnings (loss) before the following	7,137	(1,128)
Equity in earnings of associated companies (Note 3)	11,088	10,785
Minority interests in (earnings) losses of subsidiaries	<u>(265)</u>	<u>111</u>
Earnings before extraordinary items	17,960	9,768
Extraordinary items (Note 8)	<u>—</u>	<u>6,517</u>
NET EARNINGS	<u>\$ 17,960</u>	<u>\$ 16,285</u>
EARNINGS PER SHARE:		
Earnings before extraordinary items	\$ 1.49	\$ 0.81
Net earnings	<u>\$ 1.49</u>	<u>\$ 1.35</u>

Consolidated Statement of Retained Earnings

(in thousands)

	Years ended December 31,	
	1976	1975
Retained earnings, beginning of year	\$184,195	\$182,341
Net earnings	<u>17,960</u>	<u>16,285</u>
	202,155	198,626
Dividends — \$0.80 per share (1975 — \$1.20)	<u>9,640</u>	<u>14,431</u>
Retained earnings, end of year	<u>\$192,515</u>	<u>\$184,195</u>

Consolidated Balance Sheet

(in thousands)

Assets

	December 31,	
	1976	1975
CURRENT ASSETS:		
Cash and time deposits	\$ 34,256	\$ 26,983
Marketable securities, at cost which approximates market value	8,648	6,662
Accounts receivable	21,629	20,234
Receivables from associated companies	3,915	1,923
Inventories (Note 4)	<u>35,215</u>	<u>27,133</u>
	103,663	82,935
INVESTMENTS AND RECEIVABLES:		
Associated companies (Note 3)	64,914	66,278
Other, at cost (Note 6)	<u>5,879</u>	<u>2,541</u>
	70,793	68,819
PROPERTY, PLANT AND EQUIPMENT:		
Buildings and equipment (Note 5)	79,132	83,366
Properties and development, at cost less accumulated depletion of \$5,843 (1975 — \$4,718)	<u>17,705</u>	<u>18,300</u>
	96,837	101,666
	<u>\$271,293</u>	<u>\$253,420</u>

Placer Development Limited

Liabilities and Shareholders' Equity

	December 31,	
	1976	1975
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	\$ 23,555	\$ 16,334
Income and resource taxes payable	<u>7,899</u>	<u>7,037</u>
	31,454	23,371
 DEFERRED INCOME AND RESOURCE TAXES	 9,867	 8,751
MINORITY INTERESTS IN SUBSIDIARIES	19,965	20,181
 SHAREHOLDERS' EQUITY:		
Share capital (Note 9) —		
Authorized —		
20,000,000 common shares without nominal or par value		
184,000 exchangeable common shares without nominal or par value		
Issued —		
12,076,282 common shares (1975 — 12,049,100)		
less 12,278 held by a subsidiary	8,719	8,149
Contributed surplus	8,773	8,773
Retained earnings	<u>192,515</u>	<u>184,195</u>
	<u>210,007</u>	<u>201,117</u>
	<u>\$271,293</u>	<u>\$253,420</u>

APPROVED BY THE BOARD:

R. G. Duthie, Director

T. H. McClelland, Director

Consolidated Statement of Changes in Financial Position

(in thousands)

	Years ended December 31,	
	1976	1975
FINANCIAL RESOURCES WERE PROVIDED BY:		
Earnings before extraordinary items	\$ 17,960	\$ 9,768
Add (deduct) items not involving working capital —		
Depreciation and depletion	9,377	9,307
Deferred income and resource taxes	1,116	(293)
Equity in earnings of associated companies in excess of dividends received (<i>Note 3</i>)	—	(2,700)
Minority interests in earnings (losses) of subsidiaries	265	(111)
Total from operations before extraordinary items	28,718	15,971
Extraordinary items affecting working capital	—	6,170
Dividends received from associated companies in excess of equity in earnings (<i>Note 3</i>)	1,492	—
Investment in Placer Exploration Limited at December 31, 1974	—	3,731
Shares issued	570	259
Other	(156)	618
	<u>30,624</u>	<u>26,749</u>
FINANCIAL RESOURCES WERE USED FOR:		
Dividends to —		
Shareholders of the Company	9,640	14,431
Minority interests in subsidiary	481	—
Buildings and equipment	4,721	8,277
Properties and development	479	626
Recoverable royalties	2,658	—
Purchase of shares of Placer Exploration Limited	—	3,075
	<u>17,979</u>	<u>26,409</u>
Increase in working capital	12,645	340
Working capital, beginning of year	59,564	59,224
Working capital, end of year	<u>\$ 72,209</u>	<u>\$ 59,564</u>
INCREASE (DECREASE) IN WORKING CAPITAL:		
Cash and time deposits	\$ 7,273	\$ (5,792)
Marketable securities	1,986	447
Accounts receivable	1,395	11,467
Receivables from associated companies	1,992	(4,512)
Inventories	8,082	9,918
Accounts payable and accrued liabilities	(7,221)	(7,020)
Income and resource taxes payable	(862)	(4,168)
Increase in working capital	<u>\$ 12,645</u>	<u>\$ 340</u>

Notes to Consolidated Financial Statements

December 31, 1976 and 1975

1. Accounting policies:

Consolidation

The consolidated financial statements include the accounts of the Company and all of its subsidiary companies (owned more than 50%). In addition, the equity method of accounting is followed for investments in associated companies in which the Company owns from 20% to 50%. Under this method, the Company records in earnings its share of the earnings or losses of these companies, rather than dividends received. Withholding tax is provided on the undistributed earnings of foreign subsidiary and associated companies.

The excess of cost over the underlying equity in the net assets of these investments at the date of acquisition is being amortized on a straight-line basis over the estimated life of each respective mine or twenty years, whichever is shorter.

Foreign currency translations

Accounts prepared in foreign currencies are translated into Canadian dollars. Current assets, other than inventories, and current liabilities are translated at year-end rates. Inventories, non-current assets, depreciation and depletion are translated at the rates applicable at the time of the relevant transactions. Revenues and expenses, other than depreciation, depletion, and extraordinary items, are at average rates of exchange for the year. Exchange adjustments are included in the determination of net earnings (see note 2).

Inventories

Concentrates and finished and in-process industrial products are valued at the lower of cost and net realizable value; cost is determined on a first-in, first-out basis.

Supplies and raw materials are valued at the lower of cost and replacement cost; cost is determined principally on a moving average basis.

Depreciation and depletion

Depreciation is provided on the estimated useful lives of the assets on the following bases:

- (a) buildings and machinery on a straight-line basis at the rate of 5% per annum, and
- (b) mobile equipment on a diminishing-balance basis at rates of 15% to 36% per annum.

Depletion of mining properties and development

is provided on a straight-line basis over the estimated life of each respective mine or twenty years, whichever is shorter.

Exploration

Current exploration costs are charged against earnings for the year except that costs are capitalized as properties and development if economically recoverable reserves have been determined.

Deferred income and resource taxes

The Company records income and resource taxes on the tax allocation basis. Under this method, taxes are determined from accounting income not taxable income. Differences arise when some costs, principally depreciation and depletion, are reflected in different time periods for accounting purposes than for tax purposes. The tax effect of these timing differences is shown in the consolidated financial statements as deferred income and resource taxes.

2. Accounting change:

In 1976 the Company changed its method of translating certain items of foreign currencies into Canadian currency, in accordance with Statement of Financial Accounting Standards No. 8. As a result of this change, net earnings in 1976 increased by \$891,000 (7 cents per share) which is reflected primarily in cost of sales. The main reason for the increase in earnings was the decline in the Australian currency in relation to the Canadian dollar towards the end of 1976. The effect on prior years was not material and therefore the consolidated financial statements for those years have not been restated.

3. Associated companies:

In 1976, the governments of the Philippines and Canada signed a tax treaty which on ratification will reduce the Philippine withholding tax rate from 35% to 15% on cash dividends paid by Philippine corporations to residents of Canada.

In addition, a Philippine Decree provided in certain circumstances for the reduction of the withholding tax to 15% on dividends paid subsequent to January 1, 1974. In 1976 it was determined that the Company qualified in respect thereof and accordingly, equity in earnings of Marcopper has

been increased by \$3,040,000 to reflect a net refund of \$1,502,000 in respect of a tax reduction on cash dividends paid by Marcopper prior to December 31, 1975 and a credit adjustment of \$1,538,000 representing the reduction in withholding tax applicable to the Company's share of the undistri-

buted earnings of Marcopper Mining Corporation at December 31, 1975.

The 15% withholding tax rate has been applied in recording the Company's equity in earnings of Marcopper Mining Corporation for the current year.

	% Owner- ship	Quoted market price December 31, 1976 1975		Underlying equity in net assets December 31, 1976 1975		Equity in earnings years ended December 31, 1976 1975		Dividends received years ended December 31, 1976 1975	
.....(in thousands).....									
Craigmont Mines Limited	45	\$13,301	\$10,867	\$ 8,919	\$ 9,134	\$ 1,566	\$ 1,599	\$ 1,811	\$1,811
Marcopper Mining Corporation*	40	91,371	85,178	22,978	23,771	5,030	1,776	5,860**	—
Mattagami Lake Mines Limited (N.P.L.)	27	47,147	52,984	28,483	28,037	3,888	6,264	3,592	4,670
Other	28-50	not quoted		3,569	4,191	604	1,146	1,317	1,604
				63,949	65,133				
Excess of cost over underlying equity in net assets, less accumulated amortization of \$2,312,000 (1975 — \$2,132,000)				965	1,145				
				\$64,914	\$66,278	\$11,088	\$10,785	\$12,580	\$8,085

*Net of withholding tax

**Includes the withholding tax refund of \$1,502,000

Summarized below are the combined assets, liabilities and net earnings of all the above-mentioned companies—

	December 31, 1976 1975 (in thousands)			December 31, 1976 1975 (in thousands)	
Assets —			Liabilities —		
Current assets	\$136,485	\$141,209	Current liabilities	\$ 46,624	\$ 48,752
Investments and other assets	30,036	24,895	Long-term debt and deferred income taxes	24,420	21,336
Property, plant and equipment — net	145,336	154,478	Minority interests in subsidiaries	22,404	24,449
	<u>\$311,857</u>	<u>\$320,582</u>		<u>\$ 93,448</u>	<u>\$ 94,537</u>
			Combined net earnings for the year	<u>\$ 25,699</u>	<u>\$ 38,930</u>

4. Inventories:

	December 31, 1976 1975 (in thousands)	
Mining —		
Concentrates	\$ 13,904	\$ 10,859
Operating supplies	8,769	8,136
	<u>22,673</u>	<u>18,995</u>
Industrial products —		
Finished and in-process	10,131	5,236
Raw materials and supplies	2,411	2,902
	<u>12,542</u>	<u>8,138</u>
	<u>\$ 35,215</u>	<u>\$ 27,133</u>

5. Buildings and equipment:

	December 31, 1976 1975 (in thousands)	
Cost —		
Buildings and machinery	\$ 98,880	\$ 97,027
Mobile equipment	29,887	28,345
Other	1,193	1,087
	<u>129,960</u>	<u>126,459</u>
Accumulated depreciation —		
Buildings and machinery	32,857	28,116
Mobile equipment	17,282	14,389
Other	689	588
	<u>50,828</u>	<u>43,093</u>
Net book value	<u>\$ 79,132</u>	<u>\$ 83,366</u>

6. Taxes — income, resource and royalties:

Effective January 1, 1976, the Company's mining operations in British Columbia became subject to the provisions of the Mineral Resource Tax Act. Essentially, this Act imposes a tax on net mining income and replaces the previous provincial royalties and mining tax. However, during 1976, it was necessary to continue making mineral royalty payments, but these are recoverable as tax credits in future years to the extent of one-third of mineral resource taxes otherwise payable each year. The net amount of mineral royalties paid in 1976 and recoverable in future years of \$2,658,000 is included in other investments and receivables in the consolidated balance sheet.

At December 31, 1976, earned depletion of \$17,800,000 (1975 — \$18,900,000) is available to reduce income taxes of certain subsidiaries in future years.

7. Purchase of shares of Placer Exploration Limited:

Effective January 1, 1975, the Company purchased the remaining 50% of the shares of Placer Exploration Limited and under a related agreement the latter sold its investment in Placer Prospecting (Australia) Pty. Limited, a wholly owned subsidiary. The acquisition was accounted for by the purchase method and the financial statements of Placer Exploration Limited were consolidated with those of the Company from January 1, 1975. The purchase price of \$9,207,000 was in excess of the underlying book value of net assets acquired and the excess of \$1,207,000 was deducted from the extraordinary gain arising from the sale of Placer Prospecting (Australia) Pty. Limited in 1975.

The sales of Placer Exploration Limited, which relate primarily to manufacturing operations were \$34,783,000 and \$33,272,000 in 1976 and 1975, respectively.

8. Extraordinary items:

The extraordinary items for the year ended December 31, 1975 are comprised of the following:

<i>(in thousands)</i>	
Net gain on sale of Placer Prospecting (Australia) Pty. Limited	\$5,435
Income tax reduction arising from the application of prior years' exploration and other costs	<u>1,082</u>
	<u>\$6,517</u>

9. Share option and share purchase plans:

The Company's share option plan provides options over a ten-year term which are exercisable at any time during the term of the options. The option prices are 110% of the market value of the common shares at the dates the options are granted.

In 1976 options for 10,500 shares were exercised for \$208,000 cash. (In 1975, 11,200 options were exercised for \$143,000.) No further options were granted during 1976 and 1975. At December 31, 1976 there were 64,800 share options outstanding at prices ranging from \$17.12 to \$22.96 per share. There would be no material dilution of earnings per share if these outstanding share options had been exercised during the year.

The Company has a share purchase plan for its employees under which the Company contributes one-third of the cost of shares issued to employees. During 1976, 16,682 shares were issued for \$362,000 cash under this plan. (In 1975, 5,992 shares were issued for \$116,000.)

10. Pension plans:

The Company and its subsidiaries have contributory and non-contributory pension plans under which the total pension expense for 1976 was \$426,000. In 1975, the pension plan expense of \$1,192,000 included an additional provision based on actuarial computations which are obtained at least every two years. The current and past service benefits of these plans for services rendered to the balance sheet date are fully provided for, in accordance with the most recent actuarial reports and the estimated requirements for minor modifications to the plans since the report dates.

11. Remuneration of directors and senior officers:

Aggregate direct remuneration paid in 1976 by the Company and its subsidiaries to its directors and senior officers amounted to \$750,000 (1975 — \$721,000) of which \$71,000 (1975 — \$71,000) consisted of fees paid to directors.

12. Price and income controls:

The Company and its Canadian subsidiary and associated companies are subject to and believe they have complied with controls on profits, compensation and dividends under the provisions of the Federal Government's anti-inflation programme. Under the present anti-inflation legisla-

tion, dividends paid during the year ended October 13, 1977 may not exceed \$1.30 per share.

13. Subsequent event:

Subsequent to December 31, 1976, the Company acquired at a cost of approximately \$44,000,000, 81% of the shares of Canadian Export Gas & Oil Ltd. (CEGO), a company which explores for and produces crude oil and natural gas. The Company is expected to acquire further shares under the terms of its offer which expires on April 23, 1977. The purchase is being financed by a bank loan.

The acquisition of CEGO will be accounted for by the purchase method and the financial statements of CEGO will be consolidated with those of the Company from January 1, 1977.

14. Subsidiaries:

Subsidiaries of the Company at December 31, 1976 are as follows —

Active

Canex Placer Limited
Cuisson Lake Mines Ltd.
Fox Manufacturing Company (New Zealand)
Limited
Fraser Lake Development Ltd.

Gibraltar Mines Limited
Placer Amex Inc.
Placer Austex Pty. Limited
Placer Development y Cia. Limitada
Placer Exploration Limited
Placer Holdings Pty. Limited
Placer (P.N.G.) Pty. Limited

Inactive

Amex Communications Inc.
Beluga Coal Company
Canadian Exploration Limited
Canex Aerial Exploration Limited
Denak Mines Ltd. (In Voluntary
Liquidation)
Endako Mines Limited (In Voluntary
Liquidation)
Fox Manufacturing Company (South Africa)
Pty. Limited
Honduras Minera Placer S. de R.L.
Minera Placer Argentina S.A.M.I.C.T.y F.
Minera Placer S.A.
Placer Development (South Africa)
(Proprietary) Limited
Placer Development (U.K.) Limited
Placer Internationaal, B.V.
Placer Nominees Pty. Limited
Placer-Sterling (Proprietary) Limited

Auditors' Report

To the Shareholders of Placer Development Limited:

We have examined the consolidated balance sheet of Placer Development Limited as at December 31, 1976 and 1975 and the consolidated statements of earnings, retained earnings and changes in financial position for the years then ended. Our examinations of the consolidated financial statements of Placer Development Limited and those subsidiaries and associated companies of which we are the auditors were made in accordance with generally accepted auditing standards and accordingly included such tests and other auditing procedures as we considered necessary in the circumstances. We have relied on the reports of the auditors who have examined the financial statements of two associated companies.

In our opinion these consolidated financial statements present fairly the financial position of the Company as at December 31, 1976 and 1975 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles consistently applied except for the change, with which we concur, in the method of translating foreign currencies, as described in Note 2 to the consolidated financial statements.

PRICE WATERHOUSE & CO.
Chartered Accountants

Vancouver, B.C.
February 9, 1977

Supplementary Financial Information

Inflation accounting

Inflation in recent years has diluted the purchasing power or value of the dollar. Financial statements prepared on an historical cost basis commonly report dollars received or expended at the time of a transaction without regard for the changing value of those dollars. During the last few years there has been considerable study and debate in the accounting profession of methods which would reflect the effects of inflation.

In 1974 and 1975, the Company included in its Annual Report supplementary financial information which reflected changes in the general purchasing power of the dollar on the basis of guidelines issued by the Canadian Institute of Chartered Accountants. Using a single general price index, historical financial information was restated in terms of current dollars. This method of accounting for the impact of inflation, termed "Price Level Accounting," has not been universally accepted in Canada or in other countries.

In August, 1976 the Canadian Institute of Chartered Accountants issued a Discussion Paper on an alternate method, "Current Value Accounting," to encourage informed discussion of this topic within the Canadian business community. Current value accounting reflects technological advances and changing market conditions as well as inflation. Also, the United States Securities and Exchange Commission has adopted a requirement for the reporting of certain current replacement cost information (a form of current value accounting) in the Form 10K.

At present, there is no general agreement on which, if any, method of accounting for inflation is suitable for reporting to shareholders. In the light of this uncertainty, it was decided not to include supplementary financial information reflecting the impact of inflation in the Annual Report this year. The Company's 1976 annual Form 10K Report filed with the United States Securities and Exchange Commission contains partial replacement cost information for its North American operations. This replacement cost information covers inventories and productive capacity (generally buildings, machinery and equipment), and the approximate effect which replacement cost would have had on the computation of cost of sales and depreciation expense for the year. Shareholders

may obtain a copy of the Company's Form 10K Report without charge upon written request to the Secretary of the Company.

The impact of inflation for replacement cost purposes varies with the length of time between the actual historical transaction and the time the hypothetical replacement cost estimate is made. Consequently, the cost of the Company's productive capacity and related accumulated depreciation and depreciation expense determined on a replacement cost basis are significantly greater than on an historical cost basis. On the other hand, the amount of inventories, and cost of sales, are only slightly increased on a replacement cost basis because of the rapid turnover of the inventories.

Operating review 1976-1974

1976 — Endako molybdenum sales improved because of higher prices and volume while Gibraltar copper sales decreased as a result of a 19-week strike. These factors tended to offset each other and sales and cost of sales increased only moderately as a result. Exploration activity was concentrated in fewer areas resulting in exploration expense which was \$3,600,000 lower than in the previous year. Taxes declined with the abolition of the British Columbia Mineral Royalties Act effective January 1, 1976. Placer's share in earnings of associated companies reflected a non-recurring credit of \$3,040,000 resulting from a reduction in Philippine withholding tax on Marcopper dividends from 35% to 15% and lower earnings from Mattagami of \$2,400,000 primarily as a result of reduced zinc prices.

1975 — The earnings' decrease before extraordinary items was primarily due to the significant decline in the copper price. Consequently, Placer's earnings from Gibraltar declined by \$12,700,000 and its share of earnings from Marcopper and Mattagami declined by \$15,800,000. The gain on the sale of Placer Prospecting (Australia) Pty. Limited resulted in higher extraordinary earnings. Revenues and expenses for 1975 are not truly comparable to those of 1974 due to the consolidation of Placer Exploration Limited in 1975 which contributed \$33,272,000 to sales, \$25,786,000 to cost of sales and \$1,077,000 to earnings before extraordinary items.

1974 — Declining copper prices in the second half of 1974, along with lower shipments of concentrate by Gibraltar reduced sales revenues. Increased interest and other income in both 1974 and 1973 resulted from higher cash balances invested at higher interest rates. The British Columbia Mineral Royalties Act was passed in 1974 creating a new royalty expense of \$1,825,000. Exploration activity increased, resulting in increased exploration expense which included approximately \$2,000,000 spent to acquire a prospect in New Brunswick, Canada. Depreciation and depletion

decreased following completion of mining at Canex Placer's tungsten operation in 1973. With the completion of the repayment of the Gibraltar development bank loan in December 1973, interest expense ceased. An increase of \$5,300,000 in the equity in earnings of Marcopper resulted from mining higher grade ore. Extraordinary items included \$2,048,000 representing an income tax reduction arising from the application of prior years' exploration and other costs and the receipt of the final payment of \$1,486,000 on the sale of Marcopper option rights.

COMPOSITION OF NET EARNINGS PER SHARE BEFORE EXTRAORDINARY ITEMS.

Operation	Canex Placer	Gibraltar	Craigmont	Mattagami	Marcopper	Cortez	Placer Exploration	Other*	Total
1976	\$0.73	\$0.06	\$0.13	\$0.32	\$0.42	\$0.04	\$0.10	\$ (0.31)	\$1.49
1975	\$0.37	\$ (0.02)	\$0.13	\$0.52	\$0.15	\$0.10	\$0.09	\$ (0.53)	\$0.81

*Primarily represents foreign exploration expense

QUARTERLY DATA

(in thousands, except per share amounts)

1976

	1st	2nd	3rd	4th	Year Total
Sales	\$26,255	\$21,653	\$23,904	\$43,063	\$114,875
Gross profit	6,494	4,034	4,130	10,912	25,570
Net earnings	1,856	4,400	5,582	6,122	17,960
Per common share:					
Net earnings	0.15	0.37	0.46	0.51	1.49
Dividends paid	0.20	0.20	0.20	0.20	0.80
Price range (Toronto Stock Exchange):					
High	24 ⁵ / ₈	24 ¹ / ₂	25 ¹ / ₂	21	25 ¹ / ₂
Low	19	22	21 ³ / ₈	14 ³ / ₄	14 ³ / ₄

1975

Sales	24,303	29,328	24,176	32,579	110,386
Gross profit	5,585	5,651	5,040	7,334	23,610
Extraordinary items	6,517	—	—	—	6,517
Net earnings	9,813	2,354	770	3,348	16,285
Per common share:					
Net earnings	0.82	0.20	0.07	0.26	1.35
Dividends	0.30	0.30	0.30	0.30	1.20
Price range (Toronto Stock Exchange):					
High	16 ³ / ₈	19 ⁷ / ₈	22 ¹ / ₄	20 ⁵ / ₈	22 ¹ / ₄
Low	13 ³ / ₄	15 ⁵ / ₈	18 ³ / ₄	18	13 ³ / ₄

Placer Development Limited

Placer Group Interests

CANADA

Canadian Export Gas & Oil Ltd.
Canex Placer Limited
 Exploration Division
 Endako Mines Division
Craigmont Mines Limited
Gibraltar Mines Limited
Mattagami Lake Mines Limited (N.P.L.)
 Mattabi Mines Ltd.
 Canadian Electrolytic Zinc Ltd.

U.S.A.

Placer Amex Inc.
 Cortez Gold Mines
 McDermitt Mine

AUSTRALIA

Placer Exploration Limited
 Fox Manufacturing Company
 Molybond Laboratories
 Associated Plywoods Sales
 Northern Cattle Company Pty. Limited

PHILIPPINES

Marcopper Mining Corporation

MEXICO

Explomin, S.A. de C.V.

Offices

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700 Burrard Building,
Vancouver, B.C., Canada V6E 3A8
Tel: (604) 682-7082 Telex: 04-55181

Sydney Office:

Gold Fields House,
Sydney 2001, N.S.W., Australia

Auditors

Price Waterhouse & Co., Chartered Accountants,
Vancouver, Canada.

Stock Exchange Listings

Toronto Stock Exchange
Vancouver Stock Exchange
Montreal Stock Exchange
Sydney Stock Exchange
American Stock Exchange

Bankers

Canadian Imperial Bank of Commerce
The Bank of Nova Scotia
Bank of New South Wales
Brown Brothers Harriman & Co.
Bank of America
First National City Bank
Bankers Trust Company
The Chase Manhattan Bank

Transfer Agents and Registrars

National Trust Company, Limited,
Vancouver and Calgary, Canada
Canada Permanent Trust Company,
Toronto and Montreal, Canada
Professional Share Registries
(N.S.W.) Pty. Limited, Sydney, Australia
Registrar and Transfer Company,
Jersey City, N.J., U.S.A.

Ten Year Summary

(in thousands, except number of shareholders and employees)

Financial data

Revenues:

Sales	\$114,875	110,386	96,900
Interest and other income	6,073	5,801	8,661
	<u>120,948</u>	<u>116,187</u>	<u>105,561</u>

Expenses:

Cost of sales	81,053	78,460	52,809
Depreciation and depletion	9,377	9,307	8,272
Selling, general and administrative	8,876	9,419	4,833
Exploration	6,436	10,077	10,780
Interest	—	—	—
	<u>105,742</u>	<u>107,263</u>	<u>76,694</u>

Taxes — Income, resource and royalties	15,206	8,924	28,867
	<u>8,069</u>	<u>10,052</u>	<u>13,933</u>
Earnings (loss) before the following	7,137	(1,128)	14,934
Equity in earnings of associated companies	11,088	10,785	29,634
Minority interests in (earnings) losses of subsidiaries	(265)	111	(4,959)
Earnings before extraordinary items	17,960	9,768	39,609
Extraordinary items	—	6,517	3,534
Net earnings	<u>\$ 17,960</u>	<u>16,285</u>	<u>43,143</u>
Return on shareholders' equity (5 year average) — %	19.8	21.2	23.9

Operating data

Tons ore milled — Gibraltar	8,457	11,451	13,397
— Endako	9,392	9,418	7,508
	<u>17,849</u>	<u>20,869</u>	<u>20,905</u>

Copper produced (lbs. contained)

Gibraltar	63,703	83,559	90,247
Placer's share of:			
Marcopper — 40%	41,918	30,645	41,321
Mattagami — 27%	8,570	7,940	8,220
Craigmont — 45%	21,656	24,315	22,466
	<u>135,847</u>	<u>146,459</u>	<u>162,254</u>

Molybdenum produced (lbs. contained)	15,076	15,100	12,050
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Other data

Working capital	\$ 72,209	59,564	59,224
Working capital ratio	3.3:1	3.5:1	5.9:1
Total assets	\$271,293	253,420	241,341
Property additions	\$ 5,200	8,903	13,694
Average shares outstanding**	12,050	12,025	12,019
Number of shareholders	5,337	5,574	5,778

Geographical distribution of ownership — %

— Canada	77.3	75.8	74.3
— Australia	10.8	11.8	11.3
— U.S. & Other	11.9	12.4	14.4
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Number of employees	2,652	2,794	2,813
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Per common share**

Earnings before extraordinary items	\$ 1.49	0.81	3.30
Net earnings	\$ 1.49	1.35	3.59
Dividends paid	\$ 0.80	1.20	1.20
Price range on Toronto Stock Exchange — High	\$ 25½	22¼	25½
— Low	\$ 14¾	13¾	13¾

*Annual rates only.

**Adjusted to reflect two-for-one stock split in May, 1973.

1973	1972	1971	1970	1969	1968	1967
130,968	56,062	23,112	33,362	40,427	33,812	39,518
5,961	2,829	2,474	3,084	1,810	1,219	2,212
<u>136,929</u>	<u>58,891</u>	<u>25,586</u>	<u>36,446</u>	<u>42,237</u>	<u>35,031</u>	<u>41,730</u>
49,015	28,825	11,470	14,161	17,906	18,545	20,935
9,994	8,625	4,423	3,975	3,582	4,275	4,599
5,492	4,252	2,346	2,918	2,677	2,445	3,391
5,956	6,233	4,377	5,539	6,290	5,268	5,131
3,400	3,235	104	199	261	249	424
<u>73,857</u>	<u>51,170</u>	<u>22,720</u>	<u>26,792</u>	<u>30,716</u>	<u>30,782</u>	<u>34,480</u>
63,072	7,721	2,866	9,654	11,521	4,249	7,250
10,110	1,608	2,850	7,088	5,332	434	543
52,962	6,113	16	2,566	6,189	3,815	6,707
21,415	9,057	7,079	9,196	5,565	3,597	6,808
(15,307)	(2,623)	—	—	—	—	—
59,070	12,547	7,095	11,762	11,754	7,412	13,515
12,742	4,102	—	—	—	1,059	(321)
<u>71,812</u>	<u>16,649</u>	<u>7,095</u>	<u>11,762</u>	<u>11,754</u>	<u>8,471</u>	<u>13,194</u>
22.2	11.6	11.5	13.6	14.5	9.8*	16.6*
13,082	11,243	—	—	—	—	—
8,446	6,382	9,051	10,118	9,628	6,597	6,778
<u>23,528</u>	<u>17,625</u>	<u>9,051</u>	<u>10,118</u>	<u>9,628</u>	<u>6,597</u>	<u>6,778</u>
121,801	82,049	—	—	—	—	—
36,666	39,110	38,609	30,232	6,251	—	—
8,140	4,356	3,484	3,407	3,496	3,070	3,270
16,699	21,858	17,835	15,213	15,396	14,764	24,583
<u>183,306</u>	<u>147,373</u>	<u>59,928</u>	<u>48,852</u>	<u>25,143</u>	<u>17,834</u>	<u>27,853</u>
11,878	9,237	14,388	18,240	18,805	12,082	14,288
49,098	27,043	17,209	17,318	24,078	20,253	14,987
4.4:1	2.4:1	2.2:1	4.6:1	4.3:1	6.8:1	2.1:1
208,109	186,784	166,310	110,247	105,166	95,104	98,875
7,367	19,009	51,806	14,106	3,996	2,746	8,566
12,015	11,963	11,960	11,960	11,873	11,868	11,827
5,720	5,170	5,800	6,500	4,910	5,280	5,510
73.3	70.0	66.0	61.8	61.2	57.6	56.7
12.6	13.3	13.6	15.7	16.4	18.3	18.5
14.1	16.7	20.4	22.5	22.4	24.1	24.8
<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
2,326	2,434	2,138	2,149	2,129	2,091	2,267
4.92	1.05	0.59	0.98	0.99	0.62	1.14
5.98	1.39	0.59	0.98	0.99	0.71	1.12
1.20	0.47	0.46	0.68	0.59	0.36	0.36
32	23	19%	24%	23%	17½	18%
20%	12%	8%	14½	16	12	14½



Placer Development Limited

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